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ORGANIC ELECTROLYTE SECONDARY BATTERY (2000-106210**Publication Number:** JP 2000106210 A), April 11, 2000**Inventors:**

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Applicants

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Application Number: 10-274821 (JP 98274821), September 29, 1998**International Class:**

- H01M-010/40
- H01M-002/12
- H01M-004/02
- H01M-004/58

Abstract:

PROBLEM TO BE SOLVED: To prevent igniting and to enhance safety by housing a positive electrode, using a lithium nickel composite oxide as an active material and a lithium ion movable organic electrolyte in a sealed container, and including a specified range at weight percent of vinylene carbonate in the organic electrolyte. **SOLUTION:** An electrode group, prepared by winding strip-shaped positive electrode and negative electrode via a separator 5, is put in a battery can 6, the terminal of a negative electrode current collector 3 is welded to the bottom, and an electrolyte is poured into the battery can 6. A positive tab terminal 8 is welded to a positive electrode current collector 1 and a positive electrode cap 7. The battery can 6 is sealed with the positive electrode cap 7 via an insulating gasket 9. A lithium nickel composite oxide represented by the general formula $\text{LiNi}_x\text{Co}_y\text{O}_z$ ($0.7 \leq x \leq 0.9$, $0.1 \leq y \leq 0.3$, $x+y=1$, $0.001 \leq z \leq 0.02$) is used as a positive active material 2. In the electrolyte, as a solute 0.75-2.5 mol/l LiPF_6 is contained, and in addition, 1-20 wt.% vinylene carbonate is contained. **COPYRIGHT:** (C)2000,JPO

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